## A NEW SPECIES OF BIDENS (HELIANTHEAE-ASTERACEAE)

## FROM GUATEMALA

Michael O. Dillon Botany Department Field Museum of Natural History Chicago, Illinois 60605

Recently, while intercalating members of the Asteraceae into the herbarium, the following new species, *Bidens nana* Dillon, was encountered. It was originally distributed under the name *Bahia depauperata* S.F. Blake, a species that it superficially resembles.

Bidens nana Dillon, sp. nov., fig. 1.

TYPE: Guatemala, Huehuetenango, Chiantla, Aldea San Nicolás, pasto natural de la Estación Ovino, 3150 m, 12 Oct 1976, D. N. Smith 490 (holotype, F; isotype, ISC).

Herbae annuae 2-5 cm altae. Folia bipinnata 5-11 mm longa inclusis petiolis, 5-10 mm lata segmentis oblanceolatis vel ellipticis 1-5 mm longis, 0.5-1.0 mm latis. Capitula solitaria discoidea flosculis 7-10. Achaenia linearia-attenuata 3-5 mm longa, pappi aristae 2, 0.5-1.0 mm longi hamulosi.

Annual herbs, 2-5 cm tall; stems to 6 cm long, erect to procumbent, sparsely pilose. Leaves opposite, bipinnatifid, ovate in outline, 5-11 mm long, including petiole, 5-10 mm wide, the segments oblanceolate to elliptic, 1-5 mm long, 0.5-1.0 mm wide, sparsely pilose. Capitulescence solitary, terminal and axillary, peduncles 1-6 mm long. Capitula discoid, 3.0-5.5 mm high, 2-3 mm wide, often subtended by foliaceous calycerate bracts, 2-3-fid, 4-5 mm long; receptacle plane; involucres campanulate, 2-seriate; outer phyllaries oblanceolate, subfoliaceous, green, sparsely pilose, 2.5-5.0 mm long, 0.7-1.0 mm wide, apically acute, the inner phyllaries lanceolate to narrowly ovate, membranaceous, sparsely pilose, yellowish, striate, dark striped, 3.0-3.5 mm long, 1.0-1.4 mm wide, the margins hyaline, apically acute to rounded, ciliate; paleae linear-lanceolate, membranaceous, yellow striped, 4.0-4.5 mm long, apically obtuse to truncate, mucronate; florets 7-10, the corollas (4-) 5-lobed, yellow, narrowly cylindrical, 2.0-2.5 mm long, sparsely glandular; anthers black, ca. 0.8 mm long, the terminal appendages ovate, the style branches ca. 0.5 mm long, the appendages lanceolate, hispidulous. Achenes black, linear-attenuate, flattened, ribbed, 3-5 mm long, 0.3-0.6 mm wide, antrorsely setose apically; pappus of 2 awns, erect, slender, 0.5-1.0 mm long, retorsely barbellate.

This small annual is unique among the *Bidens* taxa thusfar described from Guatemala, and does not appear closely related to any of the species currently known from that country. It resembles forms of *Bidens anthemoides* (DC.) Sherff occurring in alpine habitats (above 3000 m) in central Mexico. Those individuals have a smaller habit and bipinnatifid leaves; however, their larger leaf segments and radiate capitula on peduncles over 1 cm long clearly distinguish them from *Bidens nana*.

Additional material examined: GUATEMALA: Huehuetenango. Todo Santos, Yac, Valle de la Ventura, 3550 m, 4 Oct 1977, D. N. Smith 846 (F, ISC); Huehuetenango. Chiantla, Llano de San Nicolás, 3080 m, 5 Oct 1977, D. N. Smith 849 (F, ISC); San Marcos. Ixchiguan, Cerro Cotzic, 3550 m, D. N. Smith et al. 919 (F, ISC).

ACKNOWLEDGEMENTS. I wish to thank David N. Smith for supplying additional material of this species for investigation, Benjamin Taylor for preparing the illustration, and Dr. Rolf Singer for helping with the Latin description.

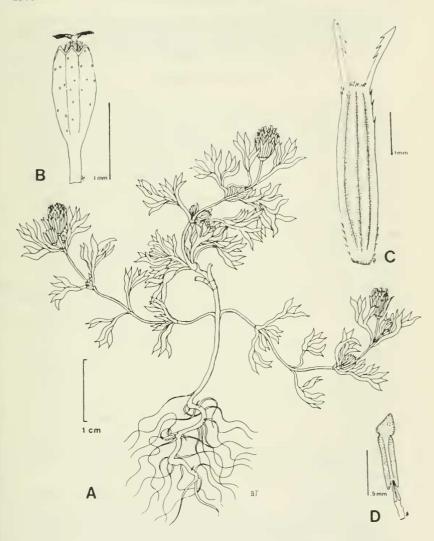


Fig. 1. Bidens nana. A, habit; B, floret; C, achene; D, anther.

(From Smith 490, F).